

255 Liter/Hr, In Tank Fuel Pump For 1984-1990 Chrysler Front Wheel Drive Vehicles Catalog # 17934 INSTALLATION INSTRUCTIONS

PLEASE study these instructions carefully before installing your new In-Tank Fuel Pump for 1984-1990 Chrysler Corporation, Front Wheel Drive vehicles. If you have any questions or problems, do not hesitate to contact our Technical Hotline at: 1-800-416-8628, from 7am-5pm PST, Mon-Fri, or via e-mail at: <a href="mailto:Edelbrock@Edelbrock.com">Edelbrock@Edelbrock.com</a>. Please fill out and mail your warranty card.

- Note: Proper installation is the responsibility of the customer. Improper or incomplete installation could result in poor performance, related component damage, potential severe engine damage, vehicle fire, and will void your warranty. If you do not feel comfortable installing these parts, we recommend having the installation performed by a professional mechanic.
- Description: This in-tank fuel pump replaces the factory pump and has an increased flow of 255 liters/hour (67 gph). This in-tank upgrade pump is ideal for supporting performance improvements such as a big-bore throttle body, high performance intake manifold, camshaft(s), turbocharger, direct port nitrous system, etc. They replace your original pump exactly and include all necessary hardware for an easy installation:

#### Kit Contents:

Oty.	<u>Description</u>
<u>1</u>	Fuel Pump
<b>1</b>	Fuel Pump Filter (Type A)
<b>□</b> 1	Fuel Filter (Type B)
<b>1</b>	Fuel Filter Adapter (For Type B)
<b>1</b>	Fuel Filter Seal (For Type B)
<b>1</b>	Fuel Pump Isolator (Thin)
<b>1</b>	Fuel Pump Isolator (Thick)
<b>1</b>	Inlet O-Ring (For Type B)
<b>1</b>	Rubber Inlet Spacer (For Type B)
<b>□</b> 3	Fuel Hoses (Straight, Loop, & 90°)
<b>2</b>	Hose Clamps
<b>2</b>	Cable Ties
<b>2</b>	Fuel Tank O-Rings
<b>1</b>	Wiring Harness
<b>2</b>	Wiring Butt Splice Connectors

# Minimum Tools Required:

# Description

- 1. Lift or appropriate jack
- 2. OSHA-approved jackstands
- 3. OSHA-approved fuel transfer pump
- 4. OSHA-approved fuel storage containers
- 5. Wire stripping and crimping tool
- 6. Various hand tools

# **INSTALLATION NOTES**

- Remember: When working on your vehicle, especially when oil or fuel is present, always work in a well ventilated area. Keep all sparks, open flames, or other sources of ignition away from the work area. Failure
  to do so could result in a fire or explosion causing vehicle or property damage, personal injury, and/or death.
- Before Beginning: This installation can be accomplished using common tools and procedures. However, you should have a basic knowledge of automotive repair and modification and be familiar with and comfortable with working on your vehicle. If you do not feel comfortable working on your vehicle, it is recommended to have the installation completed by a professional mechanic. Keeping a factory service manual for your vehicle on hand for reference is helpful.

# INSTALLATION PROCEDURE

- Note: Steps shown in these instructions are intended as a general guideline only. If you are not an experienced mechanic, you should have a copy of your service manual on hand. The installation procedure for replacing your factory fuel pump is covered in full detail in your factory service manual.
- Note: This rotary fuel injection pump will not work on carbureted fuel systems. It is for electronic fuel injection only.
- Note: The word "bracket" used throughout these instructions refers to the fuel pump mounting bracket and fuel level sender assembly.

#### **PREPARATION**

- 1. Make sure the engine is cool and the vehicle is on level ground. Set the parking brake.
- 2. Relieve any pressure in the fuel tank by removing the gas cap.
- 3. Relieve the fuel system pressure. (Note: If this procedure is not followed, damage to the injector(s) and/or other fuel system components could occur.). Begin by locating and unplugging the fuel injector wiring harness. Ground one terminal. Apply battery voltage to the other terminal for five to ten seconds to open the injector. This procedure is necessary to prevent fuel from spraying when disconnecting fuel lines. Spraying fuel could result in a fire hazard.
- 4. Remove the negative (ground) cable from the battery and position it so that it cannot make a connection to the battery during the fuel pump installation procedure.
- 5. Some vehicles require removal of the fuel tank to access the fuel pump bracket. Some require removing the rear seat, an access panel, and possibly the trunk liner to access the pump bracket. In those vehicles that require fuel tank removal, see the "Fuel Tank Removal" section. On those that do not, remove the necessary items and gain access to the top of the fuel tank and the fuel pump bracket and continue on to the "Bracket Removal" section.

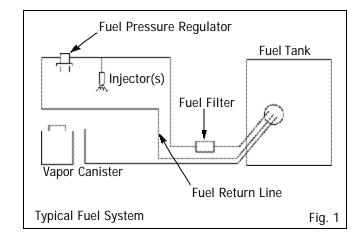
# FUEL TANK REMOVAL

(Caution: The fuel tank can be quite awkward to remove due to its size and weight. Obtain help during its removal).

(Note: The following instructions may not be specific to your particular vehicle. See your factory service manual for specific instructions).

- Drain the fuel tank. Use an OSHA-approved gasoline transfer pump, and remove as much fuel as possible through the fuel tank filler neck. Store the fuel in approved safety containers only.
- 2. Lift and safely support the vehicle with approved safety stands with enough height to gain clearance to remove the fuel tank. If lifting only the rear of the vehicle, remember to block the front wheels.
- 3. Once the vehicle is lifted and supported, an alternate method of fuel removal may be implemented. Determine which line is the fuel return line going back to the fuel tank (See Fig. 1). Trace the return line back from the injectors and remove it from the bracket. Securely attach a hose to the exposed fuel return tube leading into the tank, and draw the remaining fuel out and into an approved container.

(Note: Regardless of the method used to remove fuel from the tank, it is important to remove as much fuel as possible before removing the tank. This is required to help prevent fuel spillage, and injury from excessive weight while removing the tank).

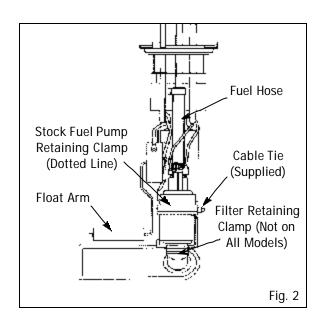


# FUEL TANK REMOVAL (continuation)

- Disconnect the electrical connector at the fuel tank to main harness connector. Disconnect the fuel lines leading to the tank. Support and partially lower the tank, if needed.
- 5. Remove the fuel filler neck, if necessary.
- 6. Support the fuel tank and remove the retaining straps to allow the tank to be removed from the vehicle. Remove the fuel tank being careful not to spill any remaining fuel.
- 7. Note the condition and position of all fuel tank mounting pads and insulators used to isolate the fuel tank from the vehicle body. Mislocated, deteriorated, or incorrect pads and/or insulators can cause objectionable transmission of fuel pump noise into the vehicle.

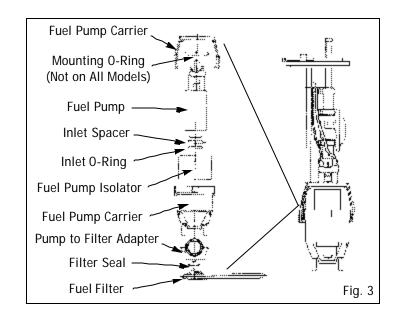
# **BRACKET REMOVAL**

- Thoroughly clean all dirt and debris from the top of the tank. Clean out any dirt from around the locking ring and retainer. This must be done to prevent dirt or foreign material from falling into the fuel tank while removing the bracket.
- 2. Lubricate the locking ring with penetrating oil to assist in its removal, and remove the locking ring using the proper tool, as specified in the factory service manual, or use another suitable method that CANNOT potentially cause sparks resulting in fire or explosion. Rotate the locking ring in a counter-clockwise direction to remove it.
- 3. Carefully remove the bracket from the fuel tank. Use care not to damage the float or float arm, if the float assembly is part of the bracket (See Fig. 2).



#### PUMP REMOVAL

- Note: See Fig. 2 and 3 for reference during the removal and installation procedure.
- Remove the filter. The filter may be attached with a clamp. If so, cut and discard the clamp. If not, remove the filter by grasping and pulling it away from the assembly. Discard the filter.
- 2. Disconnect the electrical connections to the pump. Be sure to note the polarity of the connections. (Note: On some applications the connectors will be soldered to the pump's terminals. To remove, cut the wires as close as possible to the terminals on the pump).
- 3. Remove the hose clamps, cut the rubber hose, and remove any pump mounting hardware.
- 4. Invert the bracket assembly, and pull down on the fuel pump until the inlet end clears the pump support. Swing it to the side, and remove the pump from the bracket's fuel outlet tube. Save the fuel pump rubber grommet(s) for use in mounting the new pump. Also remove the fuel pump isolator at this time. (Note: Some applications will require a metal band to be cut, which retains the pump.)
- 5. Remove the cut hose piece from the bracket tube and discard along with the used hose clamps. Remove the pump to filter adapter by pressing on the retaining tabs and discard it.



#### PUMP INSTALLATION

 Note: Your pump may be mounted in one of two ways, if mounted as shown in Fig. 2, read "Type A Installation" below. If mounted as shown in Fig. 3, continue to "Type B Installation further down.

# TYPE A INSTALLATION

- Using petroleum jelly, sparingly lubricate the fuel outlet tube on the bracket and the pump outlet fitting. Using the appropriate hose (of the three supplied in the kit) for your application, cut the hose to the proper length needed (use your stock hose as a guide if necessary).
- 2. Place the supplied fuel pump isolator (thin) over the pump.
- 3. Slip the rubber fuel hose and both hose clamps onto the fuel outlet fitting on the pump and fit the pump on the bracket. Rotate the pump as needed to obtain the best pump outlet fitting to bracket outlet tube alignment.
- 4. Slip the rubber hose over the bracket outlet tube. Make sure the hose is still fully seated against the pump. Position and tighten the hose clamps.
- 5. Using one of the supplied cable ties, secure the pump to the bracket.

# TYPE B INSTALLATION

- Using petroleum jelly, sparingly lubricate the fuel outlet tube on the bracket and the pump outlet fitting. Using the appropriate hose (of the three supplied in the kit) for your application, cut the hose to the proper length needed (use your stock hose as a guide if necessary).
- 2. Place the fuel hose and one hose clamp over the pump outlet fitting. Slip the supplied fuel pump isolator (thick) on the pump. Fit the pump into the carrier using the stock mounting o-ring (if equipped), rubber inlet spacer and inlet o-ring. Rotate the pump as required to achieve best pump outlet fitting to bracket outlet tube alignment.
- 3. Firmly seat the pump/carrier assembly into the filter adapter. Reinstall any stock pump mounting hardware.
- 4. Reattach the pump/carrier assembly to the bracket.
- 5. Slip the rubber hose over the bracket outlet tube. Make sure the hose is still fully seated against the pump. Position and tighten the hose clamps.

# PUMP INSTALLATION (Continuation)

- 1. Connect the electrical connections using the supplied wire harness and butt splice connectors, making sure proper polarity is maintained.
- Install the proper fuel filter for your application. Type A
  units press onto the bottom of the fuel pump. Type B
  units attach to the fuel pump filter adapter using the
  supplied fuel filter seal. Make sure the filter is
  positioned in the same manner as the original filter.

# BRACKET INSTALLATION

- 1. Inspect the fuel tank for dirt and debris. If the amount of dirt or debris is excessive, clean the fuel tank before installing the bracket assembly.
- 2. Inspect the bracket to make sure it is clean and ready for installation.
- 3. Use the supplied o-ring seal and place it in the groove at the fuel tank opening.
- 4. Insert the bracket being careful not to damage the fuel filter. Tighten the locking ring or bolts to secure the bracket to the fuel tank.

# FUEL TANK INSTALLATION

- 1. Inspect the condition and location of all tank mounting pads, insulators and brackets. Defective, missing or mislocated pads and insulators will cause the transmission of excessive noise into the vehicle.
- 2. Inspect and correct any defects in the fuel hoses, filler neck connections, or similar components related to the fuel system.
- 3. Install the fuel tank in the vehicle and tighten the tanks support strap bolts. Reconnect the filler neck if it was removed. Reconnect all lines and hoses and tighten securely. Connect the electrical connections. Make certain that all hoses, fittings, and electrical connections are correctly and securely attached.
- 4. Be sure that all fuel lines are correctly routed and secured in any mounting brackets. Make sure the wiring harness is installed in the original position and secured in any wire clips or brackets, if present.

#### WRAP UP

- 1. Using only equipment approved for use with gasoline, refill the fuel tank with gasoline. (Note: Always clean any gasoline spills immediately).
- 2. Inspect the fuel system for leaks. Repair any leaks before proceeding.
- 3. With the ignition switch off, reconnect the fuel injector wiring harness, and reconnect the negative (ground) cable to the battery.
- 4. Start the engine and inspect the fuel lines and connections for leaks (Note: Turn off engine and correct any leaks before continuing.).
- 5. Clear any trouble codes in the electronic control unit (ECU) that may exist as a result of the fuel pump replacement procedure. Use the factory service manual for assistance, if necessary.

#### **TROUBLESHOOTING**

Should the fuel pump fail to operate:

- 1. Check the fuel pump fuse and fuel pump relay as outlined in the factory service manual.
- 2. If the pump has power and proper polarity, check the remainder of the fuel system as outlined in the service manual.

(Note: This pump will not remedy any malfunctions in the fuel pressure regulator, fuel injectors, or other fuel system problems).

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